



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,204	01/20/2004	Akira Shimizu	NIT-407	7747
7590 09/17/2007 Mattingly, Stanger & Malur, P.C. Suite 370 1800 Diagonal Road Alexandria, VA 22314			EXAMINER FRANKLIN, RICHARD B	
			ART UNIT 2181	PAPER NUMBER
			MAIL DATE 09/17/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/759,204	<b>Applicant(s)</b> SHIMIZU ET AL.	
	<b>Examiner</b> Richard Franklin	<b>Art Unit</b> 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 7-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 is/are allowed.
- 6) ☒ Claim(s) 1,7 and 11 is/are rejected.
- 7) ☒ Claim(s) 8-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1 – 2 and 7 – 11 are pending.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03 August 2007 has been entered.
3. The Examiner acknowledges the Supplemental Amendment submitted on 21 August 2007.

#### ***Response to Arguments***

4. Applicant's arguments, see pages 6 – 10, filed 03 August 2007, with respect to the rejection(s) of claim(s) 1 and 2 under 35 U.S.C. 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of US Patent Application Publication No. 2002/0087824 (hereinafter Hum).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 7, and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Application Publication No. 2002/0087824 (hereinafter Hum).

As per claim 1, Hum teaches a method wherein a program identifier (Figure 3 Item 13, Paragraph [0021] Lines 3 – 10) set in advance in said program and a separate original request address (Figure 3 Item 10a) issued by said program are applied to a first function (Figure 3 Item 313) as two input values that are used to generate one value used as a new request address (Figure 3 Item 325) of the IO request (Paragraph [0021] Lines 3 – 16), which is different from said original request address and which is created by said program, said new request address having said program identifier appended thereto embedded therein (Paragraph [0021] Lines 13 – 16), wherein said new request address is a same size as said separate original request address (Paragraph [0026] Lines 14 – 20), and wherein said IO request is issued by using said new request address (Paragraph [0021] Lines 16 – 17).

As per claim 7, Hum teaches setting a program identifier (Figure 3 Item 13, Paragraph [0019] Lines 5 – 6, Paragraph [0021] Lines 3 – 10) in advance in a first program executed on the computer; applying, by said first program, a first function (Figure 3 Item 313) to the program identifier as a first input value and a separate original request address (Figure 3 Item 10a) obtained by said first program as a second input value to generate a new request address (Figure 3 Item 325) as an output value of the first function (Paragraph [0021] Lines 13 – 16), wherein said new request address is different from said original request address (Paragraph [0021] Lines 13 – 16), but of the same overall size (Paragraph [0026] Lines 14 – 20); and issuing said IO request by said first program using said new request address in said IO request (Paragraph [0021] Lines 16 – 17).

As per claim 11, Hum also teaches generating the new request address by the first function by entering the program identifier in unused high order bits of the original request address (Paragraph [0021] Lines 13 – 16 “concatenating”).

***Allowable Subject Matter***

6. Claim 2 is allowed.
7. The following is an examiner's statement of reasons for allowance:

Claim 2 is allowed because the prior art of record fails to teach or suggest alone or in combination ***said second program has a table associating at least one said program identifier, at least one logical volume existing in said storage apparatus***

***and at least one network address with each other; and if said IO request is an IO request issued to one said logical volume existing in said storage apparatus that is prescribed to be a protected logical volume, a second function which receives as one input value said new request address and generates, in an operation inverse to that of said first function, said original request address and said program identifier as two output values, said table is searched for said at least one network address associated with said generated program identifier and said at least one logical volume indicated by said generated original request address, and a communication with said storage apparatus is carried out by using said at least one network address as an address of a transmission originator in order to issue an IO command to said original request address, as required by independent claim 2, in combination with the other recited claim limitations*** (emphasis added).

Support for this limitation can be found in the originally filed specification at page 13 lines 4 – 16. Han teaches combining the program identifier and address, but fails to teach separating the two values and using them to complete the IO request in the fashion claimed.

8. Claims 8 – 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter:

Art Unit: 2181

Claims 8 – 10 would be allowable if rewritten in independent form to include all the limitations of the base claim because the prior art of record fails to teach or suggest alone or in combination ***receiving said IO request by a second program running on said computer; applying by said second program a second function to the new request address to derive said program identifier and said original request address; and forwarding the IO request by said second program to said storage system using said original request address for the IO request, and using a network address associated with said program identifier as an originating address of said IO request, when said program identifier indicates that said first program is authorized to access a target of said IO request,*** as required by dependent claim 8, ***in combination with the other recited claim limitations*** (emphasis added). Support for this limitation can be found in the originally filed specification at page 13 lines 4 – 16. Han teaches combining the program identifier and address, but fails to teach separating the two values and using them to complete the IO request in the fashion claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

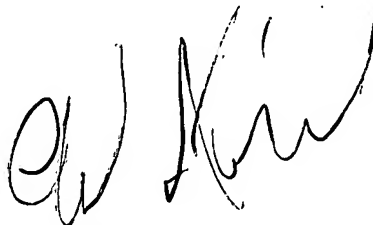
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Franklin whose telephone number is (571) 272-0669. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alford Kindred can be reached on (571) 272-4037. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Richard Franklin  
Patent Examiner  
Art Unit 2181

A handwritten signature in black ink, appearing to read 'Alford Kindred', is positioned above the printed name and title.

ALFORD KINDRED  
PRIMARY EXAMINER